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Air Quality Conformity Analysis MTC Resolution No. 3876

DRAFT TRANSPORTATION AIR QUALITY CONFORMITY ANALYSIS FOR THE 2009 TRANSPORTATION IMPROVEMENT PROGRAM

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Transportation Air Quality Conformity Analysis For 2009 Transportation Improvement Program

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I. SUMMARY OF CONFORMITY ANALYSIS

The federally required Transportation Improvement Program (TIP) is a comprehensive listing of all Bay Area transportation projects that receive federal funds or that are subject to a federally required action, or are considered regionally significant for air quality conformity purposes. MTC is required to prepare and adopt an updated TIP every two years. The 2007 TIP was adopted by the Commission on July 26, 2006 (MTC Resolution No. 3755), and approved by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) on October 2, 2006. The current 2007 TIP is only valid through October 1, 2008; therefore, in accords with federal programming requirements, MTC is in the process of developing the 2009 TIP, which is the subject of this conformity analysis.

The 2009 TIP addresses the new SAFETEA planning requirements, and covers four years of programming, starting with fiscal years 2008-09 through 2011-12. The 2009 TIP includes most of the 2007 TIP projects and an additional ten new projects, of which eight projects are exempt projects and two projects are non-exempt, non-regionally significant projects. The list of new projects to be amended into the 2009 TIP is contained in Appendix A (specific funding sources are identified in the TIP itself). Furthermore, all projects to be included in the 2009 TIP are consistent with the Transportation 2030 Plan and meet all the financial constraint requirements.

Since the 2009 TIP does not include any new regionally significant projects beyond those currently included in the Transportation 2030 Plan, and these projects have been modeled in the appropriate horizon year using the latest planning assumptions, the conformity rule allows for the reliance on the previous regional emissions analysis for conformity determinations on TIPs that are consistent with the RTP (40 CFR §93.122(g)). Thus, MTC proposes to use the latest conformity analysis for the 2007 TIP/Amendment #07-18 as the basis for the conformity determination for the 2009 TIP. The latest conformity analysis is included in the report "Final Transportation Air Quality Conformity Analysis for the 2007 Transportation Improvement Program Amendment #07-18", which was approved by FHWA/FTA on January 11, 2008.

For purposes of the conformity analysis, we state for the record:

- 1. <u>Latest Planning Assumptions, Emissions Model and Budget Comparison.</u> No new regional emission analysis is necessary for the conformity determination for the 2009 TIP. This conformity determination is based on the regional emissions analysis performed for the 2007 TIP/Amendment #07-18. Please refer to the above referenced Conformity Report for the details of this analysis.
- 2. <u>TCM Implementation</u>: The Transportation Control Measures (TCMs) A through E in the approved 2001 Ozone Attainment Plan are fully implemented. All information on the timely implementation of TCMs in the Conformity Report is still current. Please refer to the above referenced Conformity Report for the details of this analysis.

- 3. <u>Reliance on the Previous Regional Emissions Analysis</u>: Since the conformity determination for the 2009 TIP relies on the previous regional emissions analysis, MTC is required to meet the requirements of 40 CFR §93.122(g) as follows:
 - (g) Reliance on previous regional emissions analysis.
 - (1) Conformity determinations for a new transportation plan and/or TIP may be demonstrated to satisfy the requirements of §§93.118 ("Motor vehicle emissions budget") or 93.119 ("Interim emissions in areas without motor vehicle emissions budgets") without new regional emissions analysis if the previous regional emissions analysis also applies to the new plan and/or TIP. This requires a demonstration that:
 - (i) The new plan and/or TIP contain all projects which must be started in the plan and TIP's timeframes in order to achieve the highway and transit system envisioned by the transportation plan;
 - (ii) All plan and TIP projects which are regionally significant are included in the transportation plan with design concept and scope adequate to determine their contribution to the transportation plan's and/or TIP's regional emissions at the time of the previous conformity determination;
 - (iii) The design concept and scope of each regionally significant project in the new plan and/or TIP are not significantly different from that described in the previous transportation plan; and
 - (iv) The previous regional emissions analysis is consistent with the requirements of §§93.118 (including that conformity to all currently applicable budgets is demonstrated) and/or 93.119, as applicable.
 - (2) A project which is not from a conforming transportation plan and a conforming TIP may be demonstrated to satisfy the requirements of §93.118 or §93.119 without additional regional emissions analysis if allocating funds to the project will not delay the implementation of projects in the transportation plan or TIP which are necessary to achieve the highway and transit system envisioned by the transportation plan, the previous regional emissions analysis is still consistent with the requirements of §93.118 (including that conformity to all currently applicable budgets is demonstrated) and/or §93.119, as applicable, and if the project is either:
 - (i) Not regionally significant; or
 - (ii) Included in the conforming transportation plan (even if it is not specifically included in the latest conforming TIP) with design concept and scope adequate to determine its contribution to the transportation plan's regional emissions at the time of the transportation plan's conformity determination, and the design concept and scope of the project is not significantly different from that described in the transportation plan.

The 2009 TIP meets these requirements:

- The TIP contains all projects, which must be started in the TIP's timeframe in order to achieve the highway and transit system envisioned by the transportation plan.
- All TIP projects which are regionally significant are included in the Transportation 2030 Plan and have a design concept and scope adequate to determine their contribution to the Transportation 2030 Plan's regional emissions at the time of the regional transportation plan's conformity determination. Note that there are no new non-exempt, regionally significant projects being proposed for the 2009 TIP.
- The design concept and scope of each regionally significant project in the TIP is not significantly different from those described in the Plan.
- All projects in the 2009 TIP are from a conforming Plan. Allocating funds to these projects will not delay the implementation of projects in the Plan or TIP, which are necessary to achieve the highway and transit system envisioned by the Plan.
- 4. Results of Previous Regional Emissions Analysis Comparing the Motor Vehicle
 Emissions to Budgets: Motor vehicle emissions in the Bay Area must not exceed the
 applicable budgets measured in tons per day for volatile organic compounds (VOCs),
 nitrogen oxides (NOx) and carbon monoxide (CO) as contained in the State
 Implementation Plan (SIP). The vehicle activity forecasts (Table 2) and motor vehicle
 emissions calculations (Tables 3A and 3B) for the previous emissions analysis are
 provided below. The results of the previous regional emissions analysis show that
 regional emissions are below the applicable budgets. Please refer to the above
 referenced Conformity Report for details on this analysis.

TABLE 2
VEHICLE ACTIVITY FORECASTS*

	2006	2007	2015	2025	2030
Vehicles in Use	5,084,099	5,146,988	5,884,899	6,769,168	7,269,775
Daily VMT (1000s)	172,298	174,090	194,776	218,793	232,621
Engine Starts	33,893,781	34,247,285	38,510,161	43,292,850	45,971,240

^{*}VMT forecasts have been adjusted per CARB recommended methods (see Appendix B)

TABLE 3A
EMISSIONS BUDGET COMPARISONS FOR OZONE
(TONS/DAY WITH BUDGETS BASED ON SF BAY AREA-EMFAC 2000 AND ON ROAD
MOTOR VEHICLE EMISSIONS USING MORE CURRENT EMFAC 2002, V2.2)

Year	VOC Budget	On-Road Motor	TCMs*	Net Emissions
		Vehicles VOC		
2006	164.0	126.5	(0.3)	126.2
2007	164.0	116.3	(0.3)	116.0
2015	164.0	68.6	(0.3)	68.3
2025	164.0	44.6	(0.3)	44.3
2030	164.0	38.2	(0.3)	37.9

Year	NO _X Budget	On-Road Motor	TCMs*	Net Emissions
		Vehicles NO _X		
2006	270.3	248.8	(0.5)	248.3
2007	270.3	229.8	(0.5)	229.3
2015	270.3	123.5	(0.5)	123.0
2025	270.3	67.0	(0.5)	66.5
2030	270.3	55.9	(0.5)	55.4

^{*}The transit services for TCM A Regional Express Bus Program were modeled. The emission benefits from TCM A are therefore included in the On-Road Motor Vehicles VOC and NOx emission inventories for 2006 and beyond.

TABLE 3B EMISSIONS BUDGET COMPARISONS FOR CARBON MONOXIDE

Year	2004 CO Budget*	Estimated CO
2006	1,850	1,320.0
2007	1,850	1,204.9
2015	1,850	647.8
2018 (interpolated)	1,850	558.5
2025	1,850	350.2
2030	1,850	297.0

^{* 2004} Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for 10 Federal Planning Areas

- 5. <u>Financial Constraint</u>. The 2009 TIP is financially constrained based on revenue estimates from the State at the time of its preparation. The 2009 TIP addresses the new SAFETEA planning requirements, and covers four years of programming, starting with fiscal years 2008-09 through 2011-12.
- 6. <u>Interagency and Public Consultation</u> MTC initiated interagency consultation on the 2009 TIP by discussing the conformity approach for the 2009 TIP with the Air Quality Conformity Task Force on February 27, 2008. The Conformity Task Force had an opportunity to review and comment on the administrative draft conformity analysis for the 2009 TIP prior to MTC releasing the draft analysis for 30-day public review period. The public review period for the draft conformity analysis will begin on March 28, 2008 and end on May 1, 2008. MTC's Programming and Allocations Committee will hold a public hearing on the 2009 TIP, wherein comments on the

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draft conformity analysis are welcomed. In early May, MTC will reconvene the Conformity Task Force to review the response to comments and the proposed final conformity analysis for the 2009 TIP. MTC's Programming and Allocations Committee is slated to consider approval of the proposed final conformity analysis at its May 14, 2008 meeting, and the Commission is slated to take final action at its May 28, 2008 meeting.

II. RESPONSE TO COMMENTS

The 30-day comment period for the draft conformity analysis begins on March 28, 2008 and closes on May 1, 2008.

Responses to comments received are forthcoming.

III. CONFORMITY FINDINGS

Based on the analysis, the following conformity findings are made:

- This conformity assessment was conducted consistent with EPA's regulations and with the Bay Area Air Quality Conformity Procedures adopted by MTC as Resolution No. 3757.
- The 2009 Transportation Improvement Program provides for implementation of TCMs pursuant to the following federal regulation:
 - (1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are given maximum priority to approval or funding to TCMs over other projects within their control, including projects in locations outside the non-attainment or maintenance area.
 - (2) If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvements projects, e.g., the Congestion Mitigation and Air Quality Improvement Program.
 - (3) Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan. (40 CFR Part 93.113(c)).
- For carbon monoxide, motor vehicle emissions in the 2009 Transportation Improvement Program are lower than the transportation conformity budget in the SIP.
- For Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx), motor vehicle emissions in the 2009 Transportation Improvement Program are also lower than the applicable motor vehicle emission budgets for the 8-hour ozone standard.

APPENDIX A: 2009 TIP PROJECT LISTING

PROJECT INFORMATION			RTP STATUS			Air Quality			
County	Project Sponsor (Funding Agency)	Mode	Description	RTP ID	In Financially Constrained Element (YES/NO)	In Vision Element (YES/NO)	Complete & Operational By 2006, 2015, 2025, 2030	Exempt/ Non- Exempt	Regionally Significant
Contra Costa	Unincorporated Contra Costa County	Local Road	Extend Soto Street (a local road) from Market Avenue to Parr Blvd.	22610	YES	NO	2015	Non-Exempt	No
Contra Costa	Pleasant Hill	Local Road	Widen Buskirk Avenue (a local road) between Monument Boulevard and Hookston Road.	22609	YES	NO	2015	Non-Exempt	No
Alameda	WETA	Transit	Alameda-Oakland Ferry Main Street Barge. Replace 60 year old float/barge at the Main Street ferry terminal in Alameda.	21017	YES	NO	2015	Exempt	No
Contra Costa	Danville	Local Road	Green Valley Road rehab from Diablo Road to Stone Valley Road.	22769	YES	NO	2015	Exempt	No
Contra Costa	Danville	Local Road	Diablo Road pavement rehabilitation and drainage improvements	94553	YES	NO	2015	Exempt	No
Contra Costa	Danville / San Ramon	Transit	Operate a school bus program starting in FY 2010 in the peak hours to relieve congestion near schools in the San Ramon and Danville area	22402	YES	NO	2015	Exempt	No
Contra Costa	Martinez	Bike - Ped	Construct a 19-foot wide bike overcrossing to span from DiMaggio Drive to Escobar Street, within the Martinez Waterfront Park.	21202	YES	NO	2015	Exempt	No
Contra Costa	Richmond	Local Road	Carlson Blvd street reconstruction and restriping from Tehama to San Jose	22610	YES	NO	2015	Exempt	No
Regional	BART	Transit	Rail Vehicle Replacement Program. Replace aging revenue vehicles to ensure continued safety and reliability for the BART patrons.	94525, 94556, 94635, 21876	YES	NO	2025	Exempt	No
Santa Clara	VTA	Transit	Santa Clara/Alum Rock Transit Improvement/BRT - Improve existing BRT lines (the 522 El Camino and the 523 Stevens Creek) in the Santa Clara/Alum Rock Corridor including the following: signal prioritization, acquiring new vehicles with low-floor boarding, and ticket vending machines.	22014	YES	NO	2015	Exempt	No